

Remarks

The Applicant respectfully requests reconsideration of the pending claims in the instant application in view of the following remarks. Claims 12-19 are currently pending.

Claims 12-19 have been rejected under 35 U.S.C. § 102 as being anticipated by US Patent No. 4,133,851 to Ovvard (hereinafter Ovvard). Claim 12 recites a method of spreading water in an evaporative cooler. The method involves feeding a water stream to a water spreader arrangement where the water stream is divided into a pair of partial streams by flowing the water stream over a first substantially vertical projection at a first level to divide the stream into partial streams having a predetermined ratio of flow rates as the stream impinges on the first projection. Further, each of the two partial streams is divided into two further streams by flowing each partial stream over an associated one of a pair of further projections at a second level below the first.

The Ovvard reference neither teaches nor suggest the features of claim 12. Specifically, the apparatus of Ovvard does not anticipate a water spreader where the stream of water is divided into a pair of partial streams by the water flowing over a substantially vertical projection to divide the stream into partial streams with a predetermined ration of flow rate. In Ovvard, water flows from the inlet 18 to the fill assembly 10. The fill assembly includes a series of splash bars 32 arranged to contact the water. However, these splash bars do not spread water as called for by claim 12. In claim 12, water impinges a first projection and is spread into a pair of streams at a first level. Then, each stream proceeds to a next level where it impinges a second projection and is further spread into a pair of streams. As is apparent, each stream of water is divided into two streams at each level in the method of claim 12. In contrast, as water contacts the device or splash guards 32 in Ovvard, the water is randomly "splashed" over the splash guards. For instance, when a stream of water contacts the rib section 36 it is separated such that an unknown portion flows to one side and an unknown portion flows to the other side of the rib. The water then contacts a horizontal section 34 that has a plurality of holes in its surface. When the water contacts this surface, it can proceed through the holes, over the horizontal edge, or splash off the horizontal section entirely depending on the flow rate of the stream. In any of these cases, water is randomly

distributed over the splash guards in a shower type flow before proceeding to the next lower level. Furthermore, it is impossible to have a predetermined flow rate over the splash guards such that a know flow rate is proceeding to the next level.

Ovard does not teach dividing a stream in a predetermined manner. The configuration in Ovard, at best, simply takes the water confronting the splash guard and produces a series of streams that fall from the perforations in the horizontal section to a subsequent splash bar below. This process simply re-establishes any water streams falling through the matrix into smaller streams thereby maintaining a high surface area of the water. Ovard does not teach or suggest further subdividing of the streams as in claim 12.

In view of the foregoing, claim 12 is not anticipated by Ovard. Withdrawal of the rejection is respectfully requested. Further, claims 13-19 depend from claim 12 and are patentable over Ovard for the same reasons as claim 12 in view of their additional features. Withdrawal of the rejection to these claims is respectfully requested.

Claims 12-19 stand rejection under 35 U.S.C. § 102(e) as being anticipated by US Patent No. 6,068,730 to Ramm-Schmidt (hereinafter Ramm-Schmidt). Applicant submits that elements 15 of Ramm-Schmidt may not divide streams coming off element 20 at all, especially not into two streams having a predetermined ration of flow rates. If one has a relatively low flow rate of water to the element 20, given the horizontal passageway leading to element 20, the streams will flow directly downwardly from the lower corners and thus strike the rounded surfaces of the elements 15 rather than being divided into further streams as in claim 12. Viewing the applicant's disclosed arrangement it is clear that each row following the top spreader block has a plurality of projections and each plurality being a power of two. Thus, the first level spreader block divides the flow into two streams which is turned into four streams at the second level spreader block and then eight and so on. Claim 12 clearly differentiates from Ramm-Schmidt in that the clearly defined arrangement provides not just the first dividing of the flow into two parts but the first and subsequent parts are divided according to predetermined ratio of flow rates therebetween. Ramm-Schmidt fails to provide any teaching of such a further division of flow rates and will not produce the same result as claim 12. Rather, Applicant believes that the ratio of any division which may be caused by the elements which include the

10/673,839

sharp edges of 15 is a function of the velocity of the water flowing through the passage 18. Applicant notes that if the flow is very slow, low volume flow (as is the case with an evaporative cooler) no water will strike the flow guide 20 and there will be no division of the flow. On the other hand, if the flow is substantial and at high velocity, it is likely that more water will strike the downstream step-shaped expansion 14. Thus, the reference will not produce the predetermined flow rates as called for by claim 12.

Claims 13-19 depend from claim 12 and are patentable over Ramm-Schmidt for the same reasons as claim 12 in view of their additional features. Withdrawal of the rejection to these claims is respectfully requested.

In view of the foregoing, claims 12-19 are believed to be in condition for allowance. A notice of allowance is hereby solicited.

Respectfully submitted,

Date:

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Michael A. Miller

Reg. No.: 50,732

Phone: 216-241-67003

Fax: 216-241-8151

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